

Product Life cycle management for innovative Seed companies



Versioning:

Version	Date	Author	Main changes
1.0	14/10/2024	Maryam	First published version

Versioning:	2
Setup	4
• Access Policy.....	4
• Geographies.....	4
• Crops.....	4
• Currencies.....	4
• Custom Fields.....	4
• Market (in development).....	4
• Warehouses.....	4
• Users.....	4
• Options.....	4
Access Policy Module	4
Geography Module	7
Crops Module	8
Edit crop.....	9
Traits	10
Currencies Module	13
Custom Fields Module	13
Warehouse Module	15
Users Module	16
Options Module	18
Contact Types	18
Production Life Cycles	20
Trial Status	20
Trial Protocols	21
Numerical Trait Units	21
Trait Groups	22
Trial Types	22
Brands	23

Setup

There are eight sections in the setup:

- Access Policy
- Geographies
- Crops
- Currencies
- Custom Fields
- **Market (in development)**
- Warehouses
- Users
- Options

Access Policy Module

In this module, you can **view, add, and manage roles** and define what each role can see and do in each module of the system.

Here is how to add a role and define his access to modules:

1. Click on “Add New Role” button
2. Enter the role name and confirm
3. In roles table, you can manage and control access rights of all the roles.

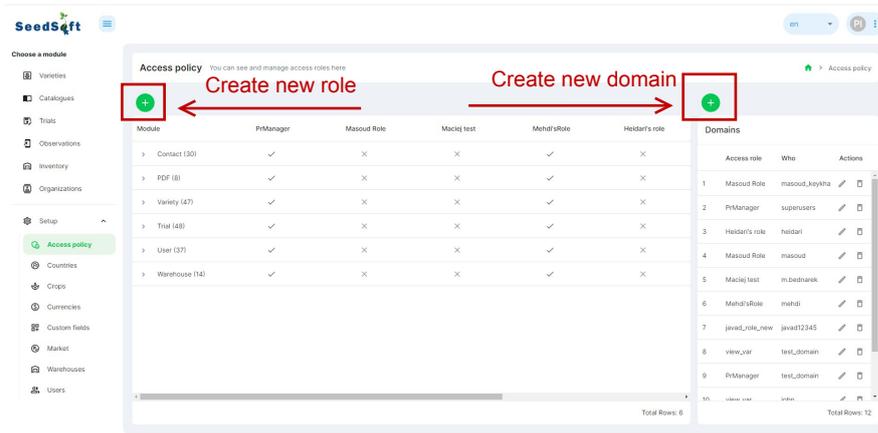
There are currently **six modules** (please see user manual for detailed explanations on them):

- Contacts
- PDF (Catalogue)
- Variety
- Trial
- User
- Warehouse

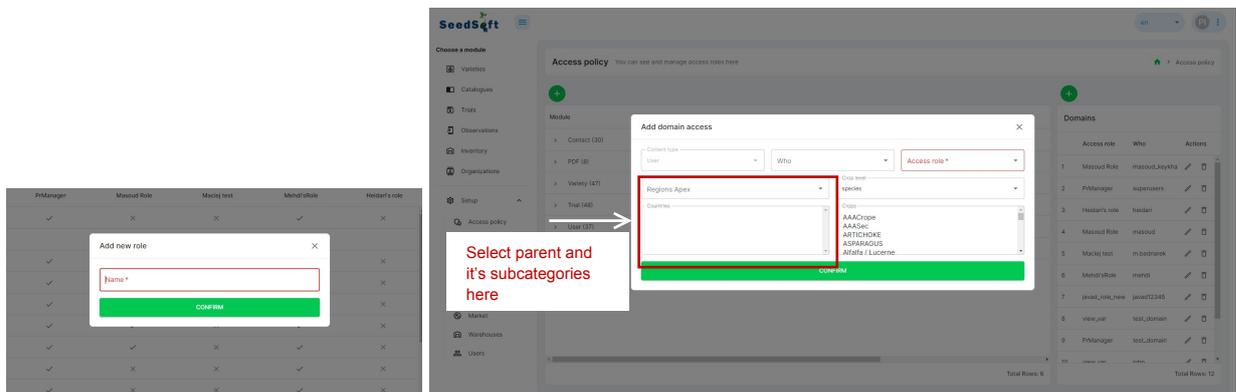
Within each module, depending on it's type, there are eight or more access rights:

- List (the items) – basic read-only right
- Create (add new item)
- Retrieve (details of an item) – also basic read-only right
- Update & Partial Update (Edit)
- Destroy (Delete)
- Some modules have additional special access rights.

For instance to different levels of custom fields, or to the information on breeders and suppliers of varieties. If you have any questions related to the access rights system, please get in touch with [SeedSoft customer service](#).



4. In the domain section, you can assign a role to a user and define **the geography** (you can define parents and subcategories in the geography module). Then in access policy, you have this option to either select multiple items individually, or simply select one parent that includes all the necessary geographies) and **crops/crop levels** to which each role has access to.



If you don't give a user any crops or geographies they'll only have access to items individually released to them – for instance only to trials where they are marked as an 'External coordinator'. This is particularly useful if you want to give access to SeedSoft to people outside of your organization.

Geography Module

In this section, the admin can view, add, and manage geographies (city, region, county, etc) used in the system. Each geography (apart from 'the World') should have a parent. A typical structure could look like:

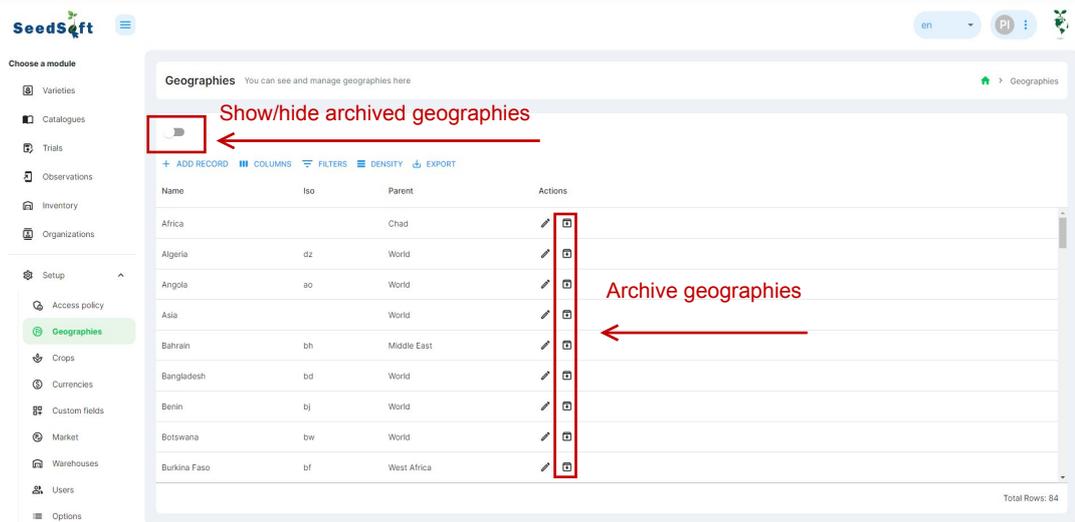
- World>Americas>USA>Florida>Bay

or

- World>Asia>ME>Bahrain

Please note that the number of levels is unlimited and you can enter information (for instance trials or PLC) at every level. This gives a great flexibility to adjust the structure to the needs of the organization.

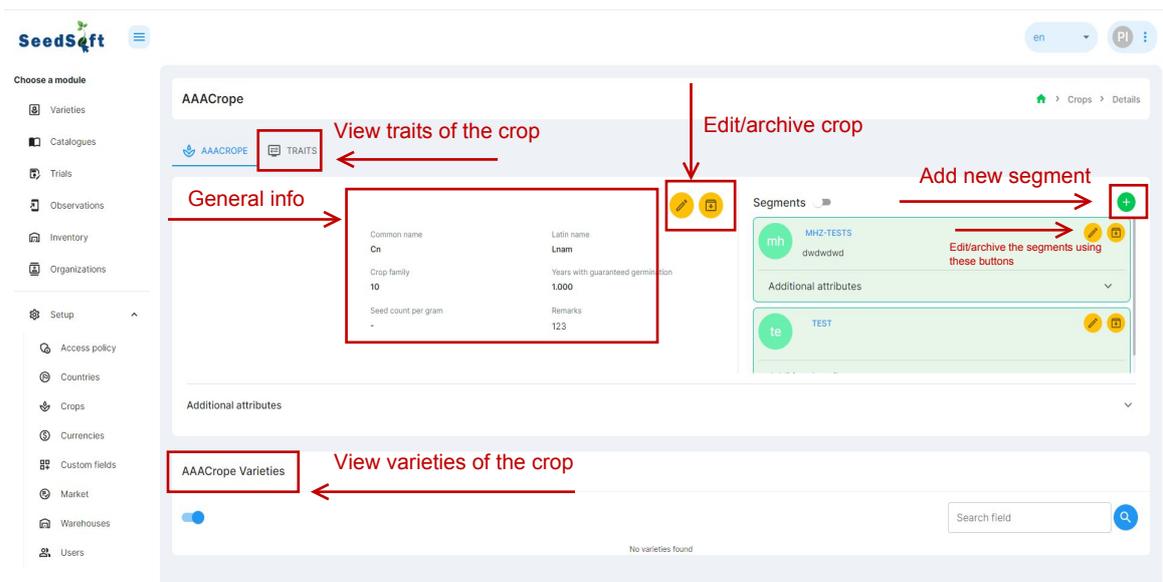
Finally Geographies like most other concepts in SeedSoft can be archived (if for instance your company leaves a certain market). Before archiving, you must ensure that **no related items** need to be archived. For example, a geography cannot be archived if there is at least one active trial, unarchived organization, unarchived sub-geography, or unarchived warehouse associated with it.



Crops Module

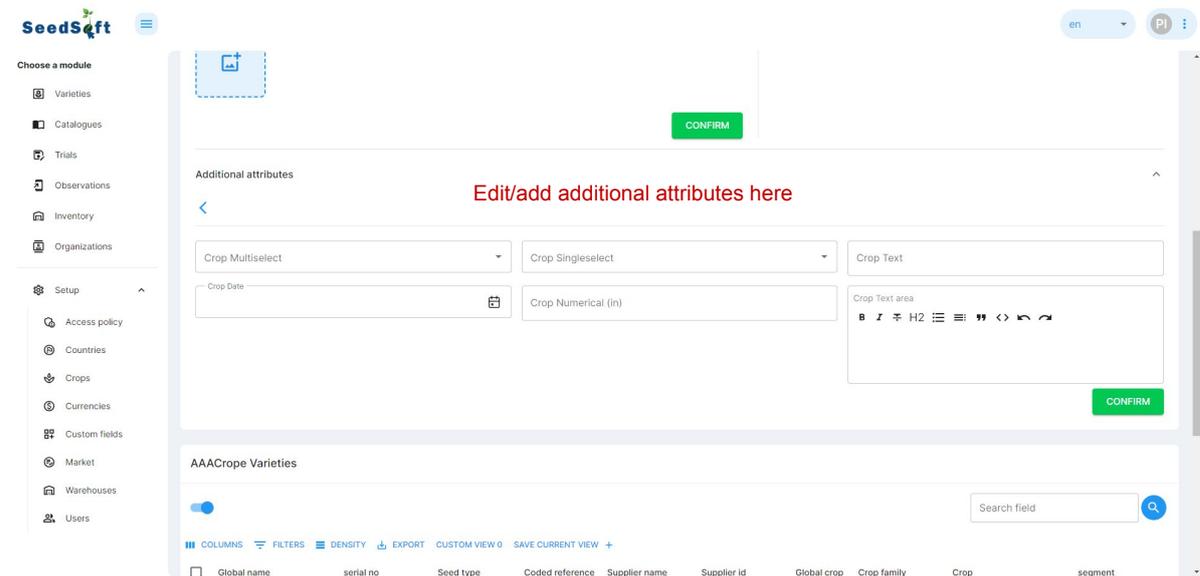
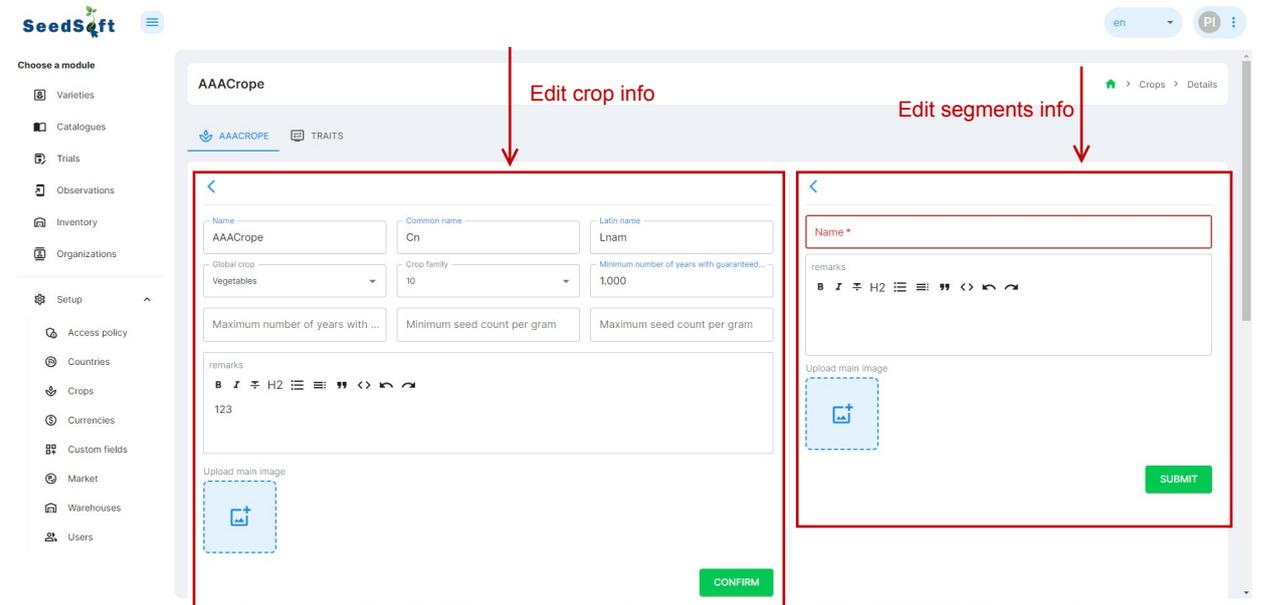
Through this module, you can view and manage **crops**. By clicking on each crop, you can see and edit

- **General info** (common name, crop family)
- **Segments**
- **Other custom fields**
- **Traits relevant for this crop**



Edit crop

By clicking on edit buttons in the crop features and segments, you can edit the related information in each section.



Traits

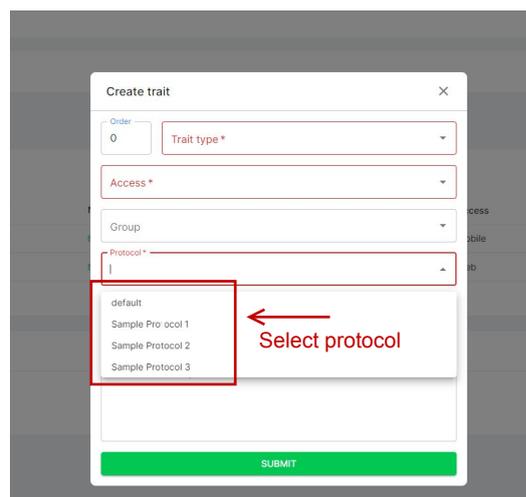
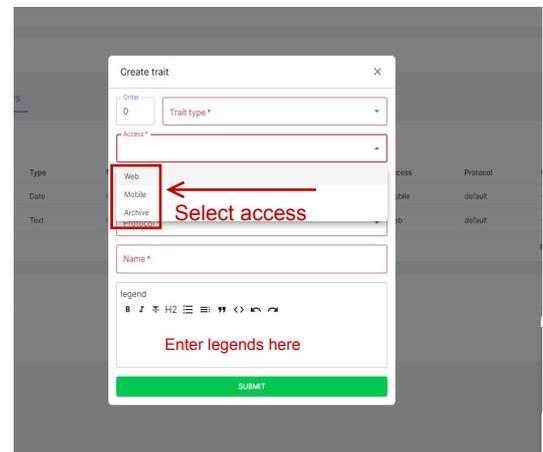
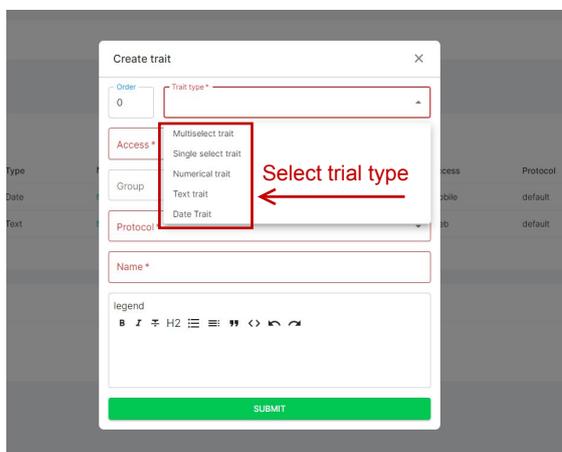
In traits, you can view and add new traits to the crop. There are five types of traits:

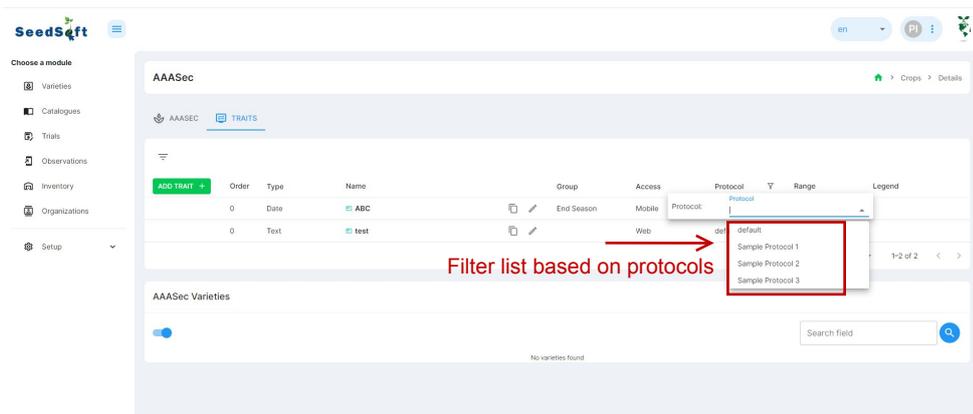
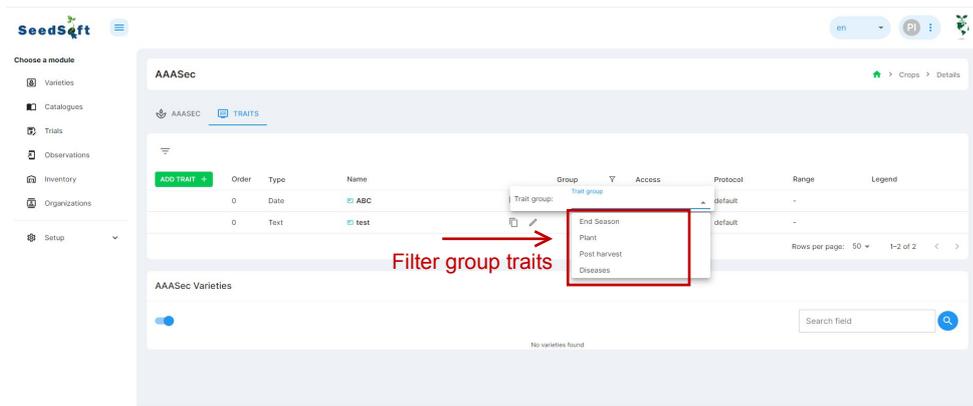
- **Multi-select:** Gives a selection with the possibility to select multiple options. For instance planting in February, March and April.
Single Select: Gives a selection with the possibility to select only 1 option. For instance: Yes or No
Numerical: Meant to collect and display numerical values (if needed many) such as the weight or amount of seeds/ crops, days, etc.
Text traits: Text input.
Date traits: Date input (selection from a calendar)

Access options define if the trait is used to:

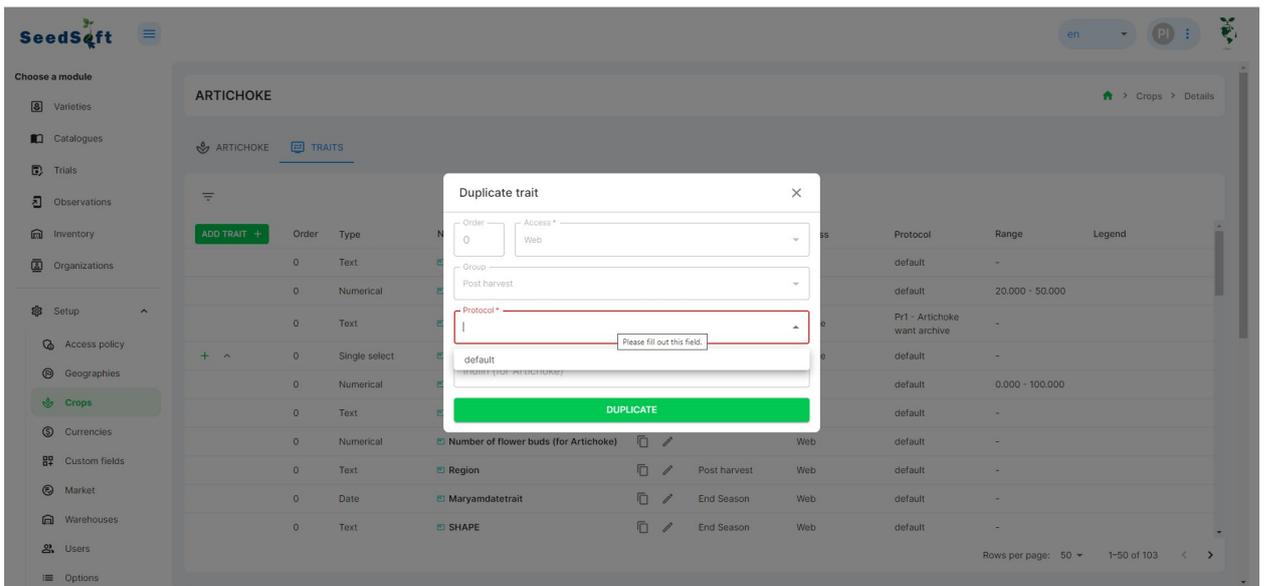
1. Describe a variety (in a catalogue): **'web'**
 2. Observe a variety in the mobile app: **'mobile'**
 3. Or is not needed anymore: **'archive'**.
- Organize the traits in the data grid table by assigning an order (rank) to them. We recommend ordering them with a gap of 10 (10, 20, 30, 40...) so that it's easy to add a trait in-between at a later stage if needed.
 - You can also group traits as per your wish. For instance you can choose to group them as related to: plant, fruit, disease, post-harvest

- Legend is the description for the trait and it's also visible in mobile app. It's main use is to inform the observer on how to mark the trait.
- Protocol refers to a specific selection of traits assessed in a trial. For example, depending on skills of an observer or needs of a particular trial, one protocol might have only a few traits focusing on fruit quality and yield, while another might be much more extensive and cover diseases, plant behaviour, seed germination and post-harvest performance.





Update: You can now duplicate a trait, but please note that the **protocol must be selected** before completing the duplication.



Currencies Module

In this section you can view list of valid currencies to use and their countries. You can also add or edit each currency.

The screenshot displays the 'Currencies' module in SeedSoft. On the left, there is a sidebar with a 'Setup' section containing various modules like 'Access policy', 'Countries', 'Crops', 'Currencies', 'Custom fields', 'Market', 'Warehouses', and 'Users'. The main area shows a table of currencies with the following data:

Currency	Symbol	Country	Actions
Afghan afghani	AFN		
CFA Franc	XAF		
Chinese Yuan Renminbi	CNY	China	
Egyptian pound	EGP	Egypt	
European euro	EUR		
Indian rupee	INR	India	
Iranian rial	IRR	Iran	
Iraqi dinar	IQD	Iraq	
Kenyan Shilling	KES	Kenya	
Mauritius Rupee	MUR	Mauritius	
Russian ruble	RUB		

A red box highlights the edit icon in the 'Actions' column for the first row, with a red arrow pointing to it and the text 'Edit currency'.

Custom Fields Module

If you need to add **custom fields** in various sections of the system such as crops, varieties, trials, etc., you can do so through this section. You can also define the **type** of the new custom field and access level required to see or edit the field.

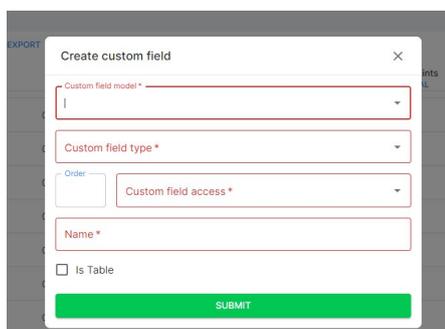
The screenshot displays the 'Custom fields' module in SeedSoft. On the left, there is a sidebar with a 'Setup' section containing various modules like 'Access policy', 'Countries', 'Crops', 'Currencies', 'Custom fields', 'Market', 'Warehouses', and 'Users'. The main area shows a table of custom fields with the following data:

Group	Order	Sub order	Value option	Type	Access type	Constraints	Is table	Actions
> logentry (1)								
> variety (76)								
> new name (2)	0			SingleSelect	Maciej_CF	-	Yes	
> + 2Maciej test EN edit	0			MultiSelect	Internal	-	No	
> + Maciej Single	(2)	0		MultiSelect	Internal	-	Yes	
> + usage test	(5)	0		SingleSelect	Maciej_CF	-	No	
> + ecology	(6)	0		SingleSelect	Maciej_CF	-	Yes	
> + color edit	(16)	0		SingleSelect	Internal	-	Yes	
> MyField3	(1)	-		Numerical	-	Unit: -, Range: 2 - 5.5, Decim ...	Yes	
> + new test	(1)	-		MultiSelect	-	-	Yes	

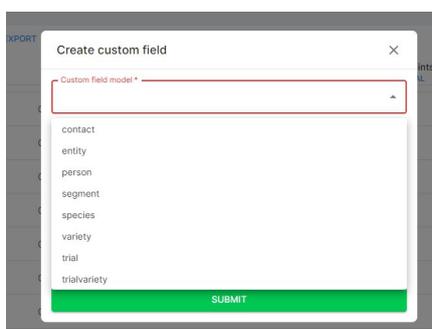
A red box highlights the 'new' button in the 'Group' column, with a red arrow pointing to it and the text 'Add values to single/multi select custom fields'.

To add a new custom field, click on the “add custom field” button. A modal will open that includes several fields:

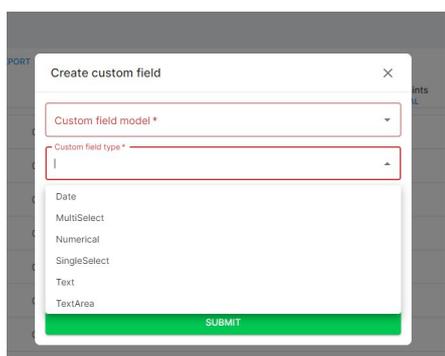
- **Model:** Select the module (or part of a module) where you’re adding this custom field.
- **Type:** Choose the type of custom field (multi-select, single-select, numerical, date, text, text area).
- **Access:** Select the access level of the custom field (internal, external, etc). Available custom field access levels are created and defined by the Seedsoft admin.



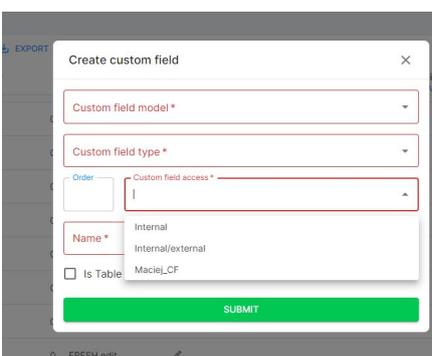
This screenshot shows the 'Create custom field' modal with the following fields: 'Custom field model *' (dropdown), 'Custom field type *' (dropdown), 'Order' (input), 'Custom field access *' (dropdown), 'Name *' (text input), and 'Is Table' (checkbox). A green 'SUBMIT' button is at the bottom.



This screenshot shows the 'Custom field model *' dropdown menu open, displaying a list of options: contact, entity, person, segment, species, variety, trial, and trialvariety. The 'SUBMIT' button is visible at the bottom.



This screenshot shows the 'Custom field type *' dropdown menu open, displaying a list of options: Date, MultiSelect, Numerical, SingleSelect, Text, and TextArea. The 'SUBMIT' button is visible at the bottom.



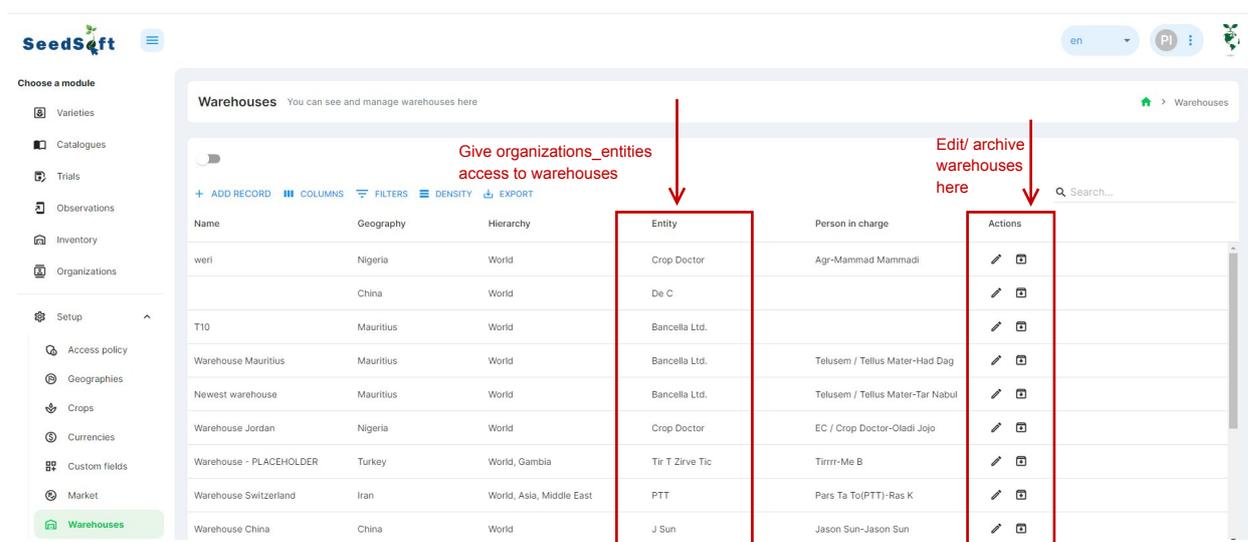
This screenshot shows the 'Custom field access *' dropdown menu open, displaying a list of options: Internal, Internal/external, and Maciej_CF. The 'SUBMIT' button is visible at the bottom.

Note: In numerical custom fields, the final amount that other users set (in related module) should be between the minimum and maximum values defined in the custom field section.

Market Module (in re-development)

Warehouse Module

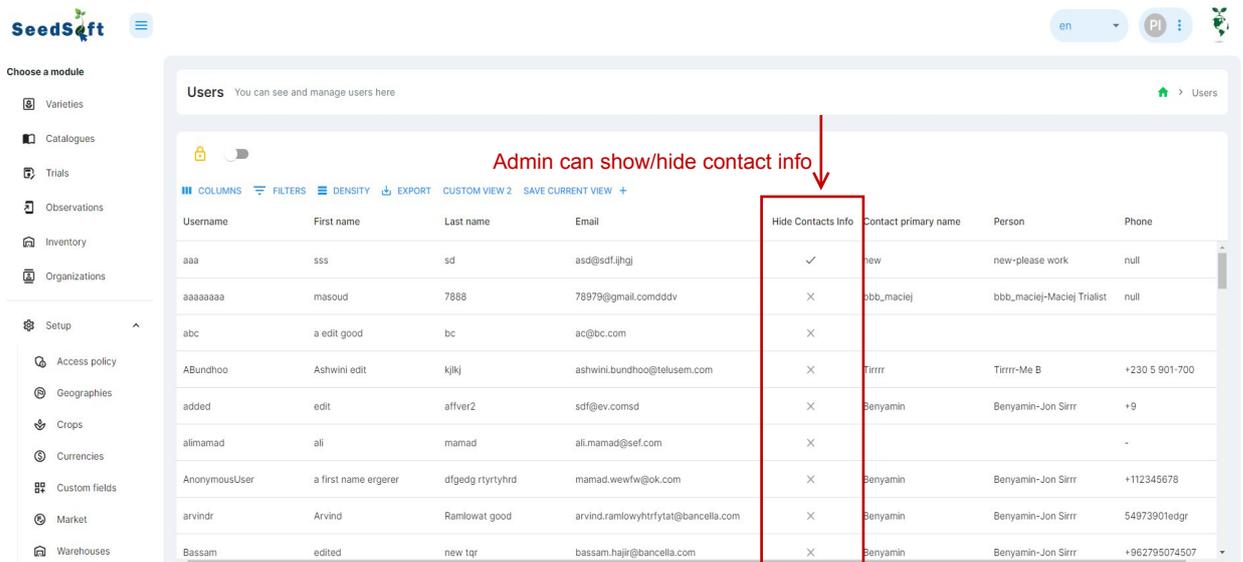
Through this section, the admin can add and manage warehouses and their entities, hierarchy, persons in charge (for each warehouse), and edit options.



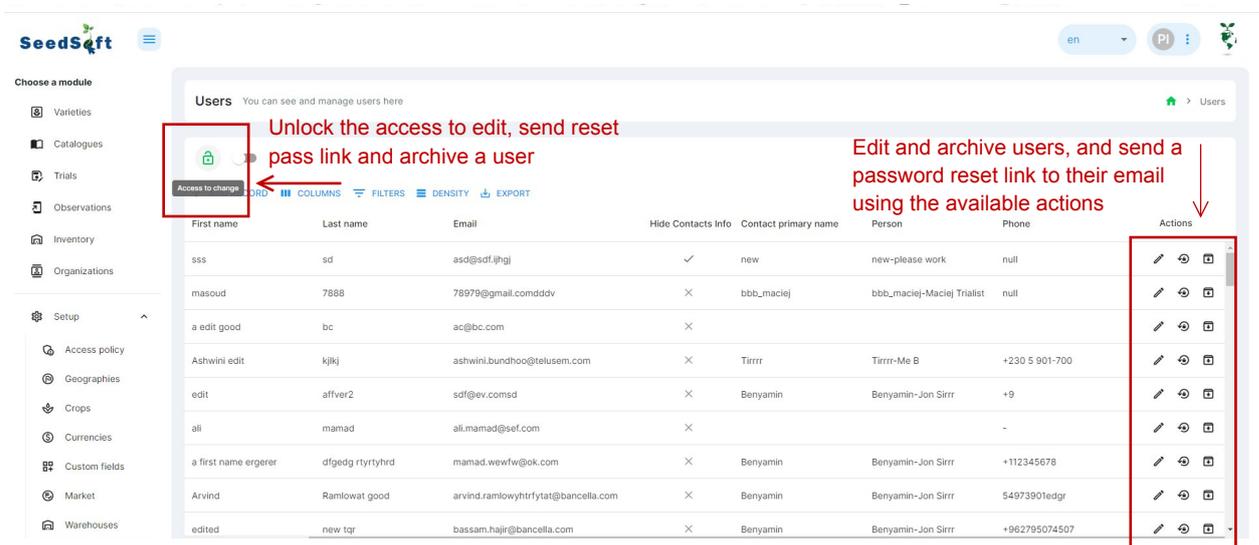
Note: To have access to warehouses and the ability to edit them, a user must first have access to the geography in the domain section and to the warehouse in the access policy. If access is granted only in the domain section or vice versa, the user will not have access to the warehouses.

Users Module

In this section, the admin registers and adds users who want to use the system or log in, along with their information (name, contact info such as email and phone, etc.). The admin can also control whether their contact info is displayed or not.



When you unlock the "access change," you can edit user information and send a password reset link to users:



You can also assign this user to a person, and by doing so, the related organization and the user will be connected:

Assign user to a person in an organization

First name	Last name	Email	Hide Contacts Info	Contact primary name	Person	Phone	Actions
sss	sd	asd@sdf.ihgj	<input checked="" type="checkbox"/>	new	Telusem / Tellus ...	null	
masoud	7888	78979@gmail.comdddv	<input type="checkbox"/>	bbb_maciej	bbb_maciej-Maciej Trialist	null	
a edit good	bc	ac@bc.com	<input type="checkbox"/>				
Ashwini edit	kijkj	ashwini.bundhoo@telusem.com	<input type="checkbox"/>	Tirrrr	Tirrrr-Me B	230 5 901-700	
edit	affver2	sdf@ev.comsd	<input type="checkbox"/>	Benyamin	Benyamin-Jon Sirrr	9	
ali	mamad	ali.mamad@sdf.com	<input type="checkbox"/>				
a first name ergerer	dfgedg rtyrtyhrd	mamad.wewfw@ok.com	<input type="checkbox"/>	Benyamin	Benyamin-Jon Sirrr	112345678	
Arvind	Ramlowat good	arvind.ramlowyhtfytat@bancella.com	<input type="checkbox"/>	Benyamin	Benyamin-Jon Sirrr	4973901edgr	
edited	new tqr	bassam.hajir@bancella.com	<input type="checkbox"/>	Benyamin	Benyamin-Jon Sirrr	962795074507	

List of people and their organizations

Username	First name	Last name	Email	Hide Contacts Info	Contact primary name
aaa	sss	sd	asd@sdf.ihgj	<input checked="" type="checkbox"/>	new
aaaaaaaa	masoud	7888	78979@gmail.comdddv	<input type="checkbox"/>	bbb_maciej
abc	a edit good	bc	ac@bc.com	<input type="checkbox"/>	
ABundhoo	Ashwini edit	kijkj	ashwini.bundhoo@telusem.com	<input type="checkbox"/>	Tirrrr
added	edit	affver2	sdf@ev.comsd	<input type="checkbox"/>	Benyamin
alimamad	ali	mamad	ali.mamad@sdf.com	<input type="checkbox"/>	
AnonymousUser	a first name ergerer	dfgedg rtyrtyhrd	mamad.wewfw@ok.com	<input type="checkbox"/>	Benyamin
arvindr	Arvind	Ramlowat good	arvind.ramlowyhtfytat@bancella.com	<input type="checkbox"/>	Benyamin
Bassam	edited	new tqr	bassam.hajir@bancella.com	<input type="checkbox"/>	Benyamin

- new-name goodd
- new-name lastname
- new-ne ed
- new-new new
- new-new nre
- new-new name
- new-new person last anem
- new-ok new
- EC / Crop Doctor-Oladl Jojo
- new-oooook super
- new-P10 p
- Telusem / Tellus Mater-Pas Feidt
- Telusem / Tellus Mater-Piet du Ple
- new-please work
- testContact-Pr1 ent3
- testContact-Pr2 ent3
- testContact-Pr3 ent1
- testContact-Pr4 ent3
- Pars Ta To(PTT)-Ras K
- new-rtf erg
- Telusem / Tellus Mater-Shaf Ab Naj
- new-should work
- Telusem / Tellus Mater-Tar Nabul

Options Module

This section provides the possibility to configure basic rules of the system based on your organization's needs and terminology.

Initially, you will see a default view of all options on one page. By using the drop-down menu, you can select your custom view.

The screenshot shows the SeedSoft Options module interface. A sidebar on the left lists various modules, with 'Options' selected. The main content area is titled 'Options' and contains three data grids: 'Contact types', 'Product life cycles', and 'Trial statuses'. Annotations in red text and arrows highlight key features:

- A red box around the 'ALL OPTIONS' dropdown menu is annotated with 'Filter data grid using this drop-down'.
- A red box around the 'Contact types' grid is annotated with 'Grant access to a contact by checking or unchecking the checkboxes.'
- A red box around the 'Actions' column of the 'Trial statuses' grid is annotated with 'Add new custom fields to each data grid based on it's type'.

Organization type name	Visible as internal coordinator	Visible as external coordinator	Visible as manager	Visible as customer	Visible as supplier	Visible as breeder	Visible in user list	visible in w
Breeding Individuals/Entity Edited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Customer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Customer/Supplier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ekifgje	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mamad contact	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
New contact type	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Supplier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PLC code	Order	Name	Access	Visible in variety	Possible in
0	0	Recorded	Internal	<input type="checkbox"/>	<input type="checkbox"/>
1	10	Screening	Indicator 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	20	Dev 1y	Internal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	30	Dev 2y	Internal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	40	Pre-commercial	Internal/external	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Status name	Visible in trial list	Visible in mobile app	color	Actions
Create just now	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Saved	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Mamad status	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#f8c775	<input type="checkbox"/>
Planned	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#f8c775	<input type="checkbox"/>
Seeds received	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#f8c775	<input type="checkbox"/>

Contact Types

Here, you can determine whether each organization, depending on its type—such as customer, breeding individuals/entity, supplier, etc.—should be displayed and selectable in related fields like internal/external coordinator in trials, manager in trials, breeder in varieties, etc.

For instance, if you give access to all organizations with the "customer" type to an external/internal coordinator, all

organizations with that type will be displayed in the list of external/internal coordinators.

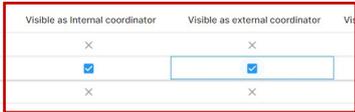
Options You can see and manage options here

ALL OPTIONS

Contact types + ADD RECORD

Organization type name	Visible as internal coordinator	Visible as external coordinator	Visible as manager	Visible as customer	Visible as supplier	Visible as breeder	Visible in user list	visible in w
Breeding Individuals/Entity Edited	X	X	X	X	✓	✓	✓	
Customer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Customer/Supplier	X	X	X	X	✓	✓	✓	
ekifgje	X	X	X	X	X	X	X	
Mamad contact	X	X	✓	✓	✓	X	X	
New contact type	X	X	✓	✓	X	X	X	
Supplier	X	X	X	X	✓	X	X	

You can determine if all organizations classified as "customer" are visible and selectable in the external/internal coordinator lists.



All organizations with the "customer" type will be displayed in this "internal and external coordinator" dropdown lists in trials

Create new trial

Organization dropdown menu:

- Pars Ta To(PTT) - PTT - Am F
- Newwww - David Brown
- sdjkhf - ergkl dfgj
- Far El Ha Ham - Far El Ha - Far El
- جديد - Entity1 - Javadi Sharifian
- Berryamin - Jon Serr
- new - kar kardi
- Maryam - Mammad Mammadi
- Maryam - Maryam testtt
- Ahm Ras - mhzh-test test
- new - name goodood

Form fields: Trial Type, Trial Status, Crop name*, Protocol*, Internal Coordinator, Sowing date, Planting date, Result date, General result, remarks, Phytosanitary Requirements.

Create new trial

Recent Activities

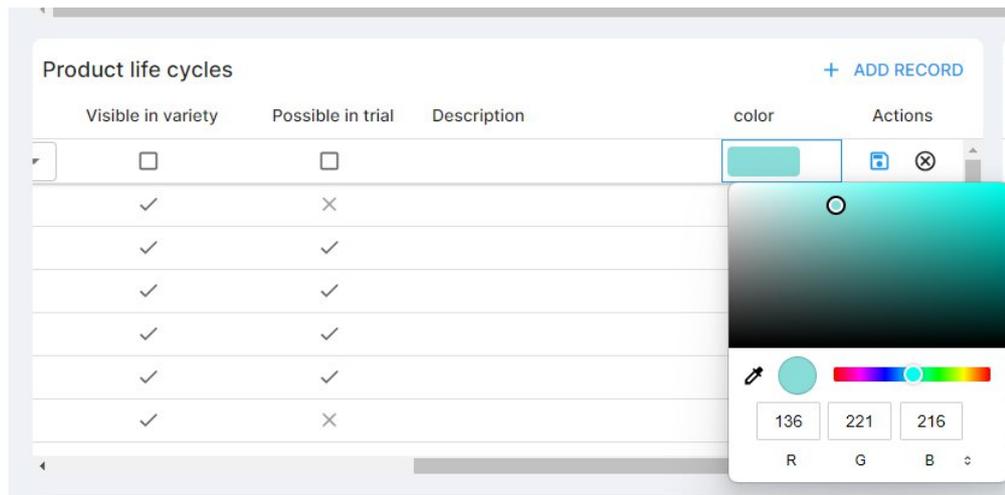
Form fields: Name, Region*, Date (2024/10/14), Global crop, Manager, External Coordinator, Sowing date, Planting date, Result date, General result, remarks, Phytosanitary Requirements.

Dropdown menu:

- EC / Crop Doctor - Crop Doctor - Oladi Jojo
- Telussem / Tellus Mater - Pascal Feldt - Pas Feldt
- Telussem / Tellus Mater - Bancella Ltd. - Piet du Pie
- new - please work
- Pars Ta To(PTT) - PTT - Ras K
- new - rrf erg
- Telussem / Tellus Mater - Bancella Ltd. - Shaf Ab Naj
- new - should work
- Telussem / Tellus Mater - Bancella Ltd. - Tar Nabul
- Ahm Ras - lets mhzh
- Utki Ki - Ulich Kir - Utk Kip

Product Life Cycles

In this table, you can specify PLC details and define access for each one, as well as determine if they should be visible in varieties or trials. The colors for each PLC can also be defined using the color wheel.



As an example you might not want that varieties in breeding stage are shown in the trials, and obsolete varieties shouldn't be visible in trials and in the variety list anymore.

Trial Status

Depending on the trial and your organization's culture, you might have various trial statuses. In this table, you can define them and choose if they should be visible in the trial list and mobile app.

The color for each status can also be defined, similar to the PLC.

Trial statuses				+ ADD RECORD
Status name	Visible in trial list	Visible in mobile app	color	Actions
Create just now	✓	✗		
Saved	✓	✓		
Mammad status	✓	✗	#48f718	
Planned	✓	✓	#69ce75	
Seeds received	✓	✓	#e1ec46	
Completed	✗	✗	#262f73	
Submitted	✓	✓		
Ongoing	✓	✓		

Trial Protocols

Add or define new protocols in this table and specify the crop to which each protocol will be assigned.

Trait protocols <input type="checkbox"/>			+ ADD RECORD
Protocol name	Crop	Description	Actions
default	EGGPLANT	Added by command	
default	FENNEL	Added by command	
default	AAACrope	Added by command	
default	AAASec	Added by command	
default	Alfalfa / Lucerne	Added by command	
default	Amaranth or Grain amaranth	Added by command	
default	ARTICHOKE	Added by command	
default	ASPARAGUS	Added by command	

Numerical Trait Units

Add or define new units for numerical inputs, along with their displayed symbols.

Numerical trait units			+ ADD RECORD
Unit name ↑	Symbol	Actions	
Meter	m		
Centimeter	cm		
Gram	gr		
Count	Count		
Kilogram	kg		
Doone Mammad	DMD		
Day/Days	day/days		
Inch EN	in		

Trait Groups

Define and customize groups of traits and descriptions (if any) in trial groups.

Trait groups			+ ADD RECORD
Group name	Description	Actions	
01. Plant			
02. Diseases			
03. Fruit			
04. Post harvest			

Trial Types

Define and customize trial types, including assigning a customized color to each trial type.

Trial types			+ ADD RECORD
Type name	color	Actions	
Other			
Regulatory			
Mammad edited			
Screening	#f1c15b		
Pre-commercial	#83e5ec		
Development	#2773ec		

Brands

Any brands in the system can be added to this table, along with their logo and other specifications.

Brands							+ ADD RECORD
Name	Abbreviation	Text color	Accent color	Background color	Logo	Actions	
Mammad Nemoone	MN	ok	ok	no			
ok							
New brand							